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**Notice of Allowability**

Application No.

10/820,732

Examiner

Phillip A. Johnston

Applicant(s)

TANAKA ET AL.

Art Unit

2881

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the RCE/amendment filed 10-3-2007.
2. ☒ The allowed claim(s) is/are 1-7 and 9-12.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
  1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.


**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material

5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),  
Paper No./Mail Date 12-17-2007.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

  
Jack I. Berman  
Primary Examiner

***Detailed Action***

1. This action is in response to the RCE/amendment filed 10-3-2007, wherein claim 8 was canceled; claims 1-3, and 5 were amended, and new claims 9-12 were added. Claims 1-7, and 9-12 are pending.

***Examiners Amendment***

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Murat Ozgu on 12-17-2007. The changes made below are underlined.

The Claims are amended as follows;

-- 1. (Currently Amended) A substrate processing apparatus comprising:  
a chamber having a container and an upper lid for closing an opening of the container, wherein the upper lid includes an electron beam irradiating part disposed in a center thereof; and an elevator for moving the upper lid, disposed integrally with the chamber; wherein the elevator includes a driving source mounted on and moving together with the upper lid, and wherein a turning force from the driving source is converted into a vertical force to move the upper lid. --

***Allowable Subject Matter***

3. Claims 1-7, and 9-12 are allowed

***Examiner's statement of reasons for allowance***

The following is an examiner's statement of reasons for allowance:

4. Claim 1 is allowed because prior art fails to show a substrate processing apparatus having a chamber with an upper lid where an electron beam device is located inside the chamber, and an elevator is used to open the lid; and where the elevator includes a driving source mounted on and moving together with the upper lid, and wherein a turning force from the driving source is converted into a vertical force to move the upper lid.

5. Claims 11 and 12 are allowed because prior art fails to show a substrate processing apparatus having a chamber with an upper lid, where the chamber is supported by threaded poles, where two poles have tubular members that rotate about the threaded poles, and wherein the tubular members are attached to the upper lid so as to move the upper lid vertically along the threaded poles when a motor rotates the tubular members about the threaded poles, and where a timing belt is disposed between the tubular members, for rotating the tubular members in synchronization.

6. Claims 2-7, 9, and 10 are allowed by virtue of their dependency upon allowed claims 1, 11 and 12.

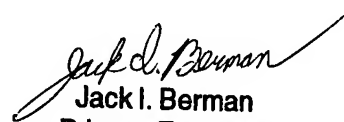
Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

**Conclusion**

7. Any inquiry concerning this communication or earlier communications should be directed to Phillip Johnston whose telephone number is (571) 272-2475. The examiner can normally be reached on Monday-Friday from 7:30 am to 4:00 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiners supervisor Robert Kim can be reached at (571) 272-2293. The fax phone number for the organization where the application or proceeding is assigned is 571 273 8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PJ  
December 19, 2007

  
Jack I. Berman  
Primary Examiner